



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/466,174	12/17/1999	HIDENORI KAWANISHI	0717-0429P	9854

7590 10/24/2003
BIRCH STEWART KOLASCH BIRCH LLP
PO BOX 747
FALLS CHURCH, VA 220400747

EXAMINER

MENEFEE, JAMES A

ART UNIT	PAPER NUMBER
----------	--------------

2828

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

BEST AVAILABLE COPY

Office Action Summary

Application N .

09/466,174

Applicant(s)

KAWANISHI ET AL.

Examiner

James A. Menefee

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16,18,19,21,22,24-26,28,29,31 and 33-42 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

- 5) ☐ Claim(s) _____ is/are allowed.

- 6) ☒ Claim(s) 16,18,19,21,22,24-26,28,29,31 and 33-42 is/are rejected.

- 7) ☐ Claim(s) _____ is/are objected to.

- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 June 2003 has been entered. Additionally, the preliminary amendment filed 11 August 2003 is now entered. Claims 16, 18, 31, 33, 36, and 40 are amended. Claims 17, 20, 23, 27, 30, and 32 are cancelled. Claims 16, 18-19, 21-22, 24-26, 28-29, 31, and 33-42 are pending.

Claim Objections

Claim 31 is objected to because of the following informalities: the term "constant" is misspelled in the last line of the claim. Appropriate correction is required.

Claim 33 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 33 requires the refractive index to be varied, while the parent claim 31 requires the refractive index to be constant. Thus, a reference could read upon claim 33 without reading upon the parent claim, making the dependency improper.

Art Unit: 2828

Double Patenting

Applicant is advised that should claims 35 or 39 be found allowable, claims 36 and 40 respectively will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Here, claim 36 as amended is now identical to claim 35, and claim 40 as amended is now identical to claim 39.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 16, 18-19, 21-22, 24-26, 28-29, 31, and 33-42 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of U.S. Patent No. 6,597,823. Although the conflicting claims are not identical, they are not patentably distinct from each other. The claims of '823 are drawn to a very similar invention of the present claims, and while they do not specify certain functions of the present invention, i.e. the spot size conversion, such functions will be inherent to the invention of '823 given that the

Art Unit: 2828

structures of the claims are so similar to that of the present claims. Further, while the multimode interference region is not explicitly claimed as a semiconductor layer, such regions are typically known in the art to be semiconductor layers. For instance, looking to the specification to see the definition of the multimode interference region, one can see that such a region will be made of semiconductor materials. Given this, the claims of '823 appear to be broader embodiments of the present invention, and thus any patenting of the present claims will improperly extend the "right to exclude" granted on '823.

Claims 16, 18-19, 21-22, 24-26, 28-29, 31, and 33-42 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,480,640. Although the conflicting claims are not identical, they are not patentably distinct from each other for the same reasons as given above in the rejection over '823.

Response to Arguments

Applicant's arguments, filed 11 August 2003, with respect to the rejection(s) of claim(s) under Paoli have been fully considered and are persuasive. Paoli does not show a graded index layer. Paoli shows a number of layers having different indexes, thus the index is not changed gradually as required in a graded index layer. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made above.

Art Unit: 2828

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. At first glance, Irakawa et al. (US 5,926,585) appears to disclose a similar invention to that of the present claims, however they are clearly distinguishable, at least because Irakawa teaches away from using a laser element as part of the integrated structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Menefee whose telephone number is (703) 605-4367. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



JM
October 6, 2003



PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800